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**1** Modular data storage with Anvil

Mike Mammarella, Shant Hovsepian, Eddie Kohler

October 2009 **SOSP '09:** Proceedings of the ACM SIGOPS 22nd symposium on Operating systems principles

**Publisher:** ACM Request Permissions

Full text available: Pdf (282.26 KB) Additional Information: full citation, abstract, references, index terms

**Bibliometrics**: Downloads (6 Weeks): 32, Downloads (12 Months): 58, Downloads (Overall): 58, Citation Count: 0

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**Keywords**: databases, modular design, software architecture

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Andrew W. Leung, Ethan L. Miller

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**Bibliometrics**: Downloads (6 Weeks): 13, Downloads (12 Months): 84, Downloads (Overall): 271, Citation Count: 4

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Russell Sears, Eric Brewer

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Full text available: Pdf (492.74 KB) Additional Information: full citation, abstract, references

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Dan Decasper, Zubin Dittia, Guru Parulkar, Bernhard Plattner

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**Bibliometrics**: Downloads (6 Weeks): 9, Downloads (12 Months): 57, Downloads (Overall): 764, Citation Count: 8

**Keywords**: communication system routing, communication system security, internet, modular computer systems

5 Hiding I/O latency with pre-execution prefetching for parallel applications

Yong Chen, Surendra Byna, Xian-He Sun, Rajeev Thakur, William Groop

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**Keywords**: data cache, memoty bottleneck, multithreading, packet processing, processor architectures, reconfigurable architectures, routers

Also published in:

October 2007 **SIGCOMM Computer Communication Review** Volume 37 Issue 4

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**1** An adaptable multithreaded prefetching technique for client-server object bases

Nils Knafla

January 1998 **Cluster Computing** , Volume 1 Issue 1

**Publisher:** Kluwer Academic Publishers

Full text available: Publisher Site

Additional Information: full citation, abstract, references

**Bibliometrics**: Downloads (6 Weeks): n/a, Downloads (12 Months): n/a, Downloads (Overall): n/a, Citation Count: 0

Given the existence of powerful multiprocessor client workstations in many client-server object database applications, the performance bottleneck is the delay in transferring pages from the server to the client. We present a prefetching ...

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**3** Toward the parallelization of GSL

Jose Ignacio Aliaga, Francisco Almeida, Jose Manuel Badía, Sergio Barrachina, Vicente Blanco, Maria Castillo, Rafael Mayo, Enrique S. Quintana, Gregorio Quintana, Alfredo Remón, Casiano Rodríguez, Francisco Sande, Adrian Santos

April 2009 **The Journal of Supercomputing** , Volume 48 Issue 1

**Publisher:** Kluwer Academic Publishers

Additional Information: full citation, abstract, references

**Bibliometrics**: Downloads (6 Weeks): n/a, Downloads (12 Months): n/a, Downloads (Overall): n/a, Citation Count: 0

In this paper, we present our joint efforts to design and develop parallel implementations of the GNU Scientific Library for a wide variety of parallel platforms. The multilevel software architecture proposed provides several interfaces: a sequential ...

**Keywords**: GNU Scientific Library, Numerical scientific computing, Parallel algorithms and architectures, Web services

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5 BORG: block-reORGanization for self-optimizing storage systems

Medha Bhadkamkar, Jorge Guerra, Luis Useche, Sam Burnett, Jason Liptak, Raju Rangaswami, Vagelis Hristidis

February 2009 **FAST '09:** Proccedings of the 7th conference on File and storage technologies

**Publisher:** USENIX Association

Additional Information: full citation, abstract, references, index terms

**Bibliometrics**: Downloads (6 Weeks): n/a, Downloads (12 Months): n/a, Downloads (Overall): n/a, Citation Count: 1

This paper presents the design, implementation, and evaluation of BORG, a self-optimizing storage system that performs automatic block reorganization based on the observed I/O workload. BORG is motivated by three characteristics of I/O workloads: non-uniform ...

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7 Hyperion: high volume stream archival for retrospective querying

Peter J. Desnoyers, Prashant Shenoy

June 2007 **ATC'07:** 2007 USENIX Annual Technical Conference on Proceedings of the USENIX Annual Technical Conference

**Publisher:** USENIX Association

Additional Information: full citation, abstract, references, index terms

**Bibliometrics**: Downloads (6 Weeks): n/a, Downloads (12 Months): n/a, Downloads (Overall): n/a, Citation Count: 1

Network monitoring systems that support data archiving and after-the-fact (retrospective) queries are useful for a multitude of purposes, such as anomaly detection and network and security forensics. Data archiving for such systems, however, is complicated ...

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**Keywords**: c-store, column-oriented dbms, column-store, compression, invisible join, tuple materialization, tuple reconstruction

**11** CumulVS: Interacting with High-Performance Scientific Simulations, for Visualization, Steering and Fault Tolerance

James A. Kohl, Torsten Wilde, David E. Bernholdt

May 2006 **International Journal of High Performance Computing Applications** , Volume 20 Issue 2

**Publisher:** Sage Publications, Inc.

Additional Information: full citation, abstract, references, index terms

**Bibliometrics**: Downloads (6 Weeks): n/a, Downloads (12 Months): n/a, Downloads (Overall): n/a, Citation Count: 0

High-performance computer simulations are an increasingly popular alternative or complement to physical experiments or prototypes. However, as these simulations grow more massive and complex, it becomes challenging to monitor and control their execution. ...

**Keywords**: CCA, CUMULVS, ECho, Global Arrays, MPI, MxN, PVM, computational steering, fault tolerance, model coupling, visualization

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Also published in:

October 2007 **SIGCOMM Computer Communication Review** Volume 37 Issue 4

**13** Clotho: decoupling memory page layout from storage organization

Minglong Shao, Jiri Schindler, Steven W. Schlosser, Anastassia Ailamaki, Gregory R. Ganger

August 2004 **VLDB '04: Proceedings of the Thirtieth international conference on Very large data bases - Volume 30** , Volume 30

**Publisher:** VLDB Endowment

Full text available:  Pdf (212.45 KB) Additional Information: full citation, abstract, references, index terms

**Bibliometrics**: Downloads (6 Weeks): 4, Downloads (12 Months): 30, Downloads (Overall): 42, Citation Count: 1

As database application performance depends on the utilization of the memory hierarchy, smart data placement plays a central role in increasing locality and in improving memory utilization. Existing techniques, however, do not optimize accesses to all ...

**14** Global memory management for a multi computer system

Dejan Milojicic, Steve Hoyle, Alan Messer, Albert Munoz, Lance Russell, Tom Wylegala, Vivekanand Vellanki, Stephen Childs

August 2000 **WSS'00: Proceedings of the 4th conference on USENIX Windows Systems Symposium - Volume 4** , Volume 4

**Publisher:** USENIX Association

Additional Information: full citation, abstract, references, index terms

**Bibliometrics**: Downloads (6 Weeks): n/a, Downloads (12 Months): n/a, Downloads (Overall): n/a, Citation Count: 0

In this paper, we discuss the design and implementation of fault-aware Global Memory Management (GMM) for a multikernel architecture. Scalability of today's systems is limited by SMP hardware, as well as by the underlying commodity operating systems ...